1: Fitzgerald H-5 (1937-1938) AE3 Sino-Tibetan
Border Peoples AE3

312 134 flooding in very wet years, when the water of the lake, unable to escape through the very narrow passage of the Dragon's Tail Pass, overflows on to the flat western shore. Unless the flood becomes so deep as to cover the ears of rice, this does no harm, and such exceptional depths are rare. Yet on account of these two risks the land nearest the lake shore, in appearance the best on the plain, is in fact of less value than fields nearer the mountain slopes.

134 Unlike almost all other parts of Yunnan the soil of the Ta Li plain is not the red clay associated with the prevailing Yunnan limestone rocks, but a heavy black soil due to the fact that Ts'ang Shan is an upthrust of granite breaking 133 through the limestone cap of the Yunnan plateau. This geological peculiarity has one serious disadvantage, the frequency of severe earthquakes on the Ta Li plain. Slight shocks are common in the dry season, especially after one of the winter spells of drizzle, but a major earthquake in the spring of 1925 not only destroyed most of the city of Ta Li but caused much greater havoc and a very heavy loss of life in the lakeside villages, where a wave from the lake did further damage. Local records mention other severe earthquakes in previous centuries, but for many years before 1925 no serious shock had occurred, nor has there been a major earthquake since that date.

311 Apart from a narrow belt of willow groves along the lake shore, where flooding is usual, the entire surface of the plain is under cultivation. The villages as far as possible are built on the shore itself, or on the lowest slopes of the mountain, to free as much land as possible for the cultiva- [491] tion of rice. Even the main caravan road, a stone-paved path about six feet wide, skirts the slopes of the mountain, and the paths leading to villages and fields are narrow and follow the dykes along irrigation channels. Very little land is devoted to market gardening, usually only such patches by

1: Fitzgerald H-5 (1937-1938) AE3 Sino-Tibetan
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the lake shore as, having recently been reclaimed from the water, are raised too high to be reached by the irrigation channels. Rice is the main crop, the crop to which all other cultivation is subordinated, to grow which the topography of the plain has been laboriously remodelled.

In sharp contrast to the flat fertile western shore of the lake, fringed with willow groves and prosperous villages, the eastern shore rises abruptly from deep water, barren rocky hills rising to about 8,500 feet, or 2,500 above the lake. Not only the geology but also the climate is different on this side of the water. The prevailing Yunnan limestone here reappears, much weathered, and almost denuded of soil and vegetation. Much of the surface of these eastern hills is sharp weather-worn rock, with only small pockets of red clay scattered among the outcrops. The height of Ts'ang Shan to the west precipitates most of the rainfall, so that the region east of the lake is altogether dryer and more barren. Few trees grow on the eastern hills, and cultivation is only possible in the rare valleys running down to the lake. On the other hand the climate of these eastern hills is very suitable for fruit, and where sufficient soil exists there are highly productive orchards growing pears, peaches, and further east, citrus.

Towards the south-east corner of the lake the hills recede leaving the small plain of Feng Yi along the shore of the lake. This plain and the valleys running down from the Ting Hsi Ling range—the Red River-Mekong Divide—is the most southerly Min Chia territory, for east of the Tung Hsi Ling no Min Chia are found in the plain of Mi Tu.[1] The eastern border of the Min Chia country is somewhat

[1] There are in fact a few villages of Min Chia scattered about the Districts of Mi Tu and Hung Ai. These are certainly immigrants from the Ta Li plain, probably settled there since the Mohammedan rebellion of the eighteen-seventies.

1: Fitzgerald H-5 (1937-1938) AE3 Sino-Tibetan
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CHAPTER 2

THE RICE STANDARD

RICE IS THE real standard of wealth among the Min Chia. Direct barter of rice for commodities is common, rents are paid and calculated in rice, and rice producing land is the chief investment of the wealthy, and the principal source of revenue for the government. No other crop compares with rice either in actual value or in the estimation of the people. Land which is unsuitable for rice cultivation is hardly regarded as anything better than waste. In consequence of this preoccupation with the rice crop the Min Chia neglect the development of other forms of agriculture and have failed to exploit all the possibilities of land on which rice cannot be grown.

The Min Chia are rarely if ever found on land where rice cultivation is impossible, they avoid the mountains, and when the excess of population makes its impossible for all to engage in rice farming, they prefer to emigrate to distant parts of the Province rather than cultivate other crops upon the mountain sides. Whether this is to be explained as the failure of an immigrant people of lowland origin to adapt itself to the life of mountaineers, or as the whole-hearted conversion of a people, once pastoral hillmen, to the advantages of intensive agriculture, there is no direct evidence to show. The Min Chia lack any tradition of immigration to their present home, and it may be regarded as certain that they have practised their present mode of life for at least seven centuries.

Although there is thus an ancient tradition in support of rice farming, and an almost psychological aversion to living on the mountains, there are also strong economic arguments

1: Fitzgerald H-5 (1937-1938) AE3 Sino-Tibetan
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in favour of rice cultivation. The yield of rice, very much higher per acre than that of wheat or maize, the alternative cereal crops, enables a larger population to live in a restricted area. Furthermore, the climate of Ta Li (though not of the northern Min Chia areas) makes it possible to grow wheat and beans on the rice lands in winter, so that two crops a year can be harvested off the same land. A comparatively small holding of rice land, ten Chinese acres (*mu*) or an English acre and a half, is sufficient to support a family of five persons.[1] Consequently there was little incentive to undertake the cultivation of maize or fruit on the mountain sides while population still remained low, or fresh rice land in adjoining valleys was easily available. When these conditions ceased to apply the tradition of rice farming had secured so strong a hold upon the people that they preferred to emigrate to great distances rather than abandon their manner of life.

Other considerations have combined to enhance the value of rice land and reinforce the hold which the "rice standard" has obtained on the Min Chia mind. Since the area suitable for rice is limited, and was long ago brought under cultivation, good land has acquired a scarcity value, and this in turn has been enhanced by the universal will to ownership. The poor seek to buy land even at great sacrifice, the rich regard land purchase as the only safe investment. To be landless is regarded as a grave misfortune, and even to have to rent additional land is considered regrettable. It is of course true that in a community without banks or joint stock companies, land is the best investment, indeed the only really safe one. Land will survive most calamities. Fire may destroy merchandise or a hoard of treasure, and insur-

[1] The *Mu* or Chinese Acre by which land all over China is measured, is not, however a fixed unit. The *Mu* varies slightly in every district, and even in different villages. In Yunnan the equivalent of $\frac{1}{7}$ of an English acre to the *Mu* is approximately correct for the Ta Li district.

1: Fitzgerald H-5 (1937-1938) AE3 Sino-Tibetan
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ance is unknown. War or banditry may ruin a merchant, but a farmer will probably come through a period of disorder at least with his land intact and sufficient part of the crop to live on. Although public order in western Yunnan is now well maintained, it was not always so; even within the memory of men still quite young the roads were unsafe and one could not venture a few miles from the city without running the risk of robbery.

The peculiarity of the Min Chia system is not therefore the high value placed on land itself, but the exclusive preference for rice lands. If the lack of public security in the past was the only reason for high land values it would apply as much to the mountains as to the plain, indeed perhaps more, for the inhabitants of a mountain district would be too remote to suffer much risk of robbery or pillage at the hands of soldiery. The mountain lands, however, are not regarded as worth anything at all, they are not even owned. The whole surface of the mountain and its lower slopes is public land, or in other words free to all comers, waste, neither subject to rent nor tax. Yet, though certainly useless for rice cultivation, these lands if terraced could grow other crops, and are in fact covered with wild fruit bushes and forest.

The Min Chia therefore revolve in an economic vicious circle of their own making: rice cultivation alone is regarded as worth while, but as the area of suitable land is restricted it has become very valuable, and being valuable is regarded as the most desirable investment, which reinforces the importance attached to rice cultivation. Meanwhile, overlooking the rice plain of Ta Li, is a vast tract of waste land, certainly capable of exploitation, but which, being mountain, the Min Chia farmer entirely ignores. Since the whole of Yunnan, in common with the rest of south China, also produces rice, and for the most part in sufficient quan-

snow. Toward the south, the horizon is blocked by mighty Min-shan, 133
a chain of Matterhorns with peaks almost 6,000 meters high, with glaciers and the imposing notch of the "Stone Gate" (Shih-men) which leads over into Szechuan. There are memories of distant rides on 136
horseback, of meditative walks beneath the deep blue sky of the alps; or of dark, storm-driven rain clouds in the solemn peace of the highlands, the quiet broken only by the song of the lark, the shrill cry of the falcon or the deep croak of the raven and the lively whistle of the ground hog. The vast steppe, utterly deserted by man, is animated now and then by herds of gazelles, a few hovering vultures or eagles high in the heavens. Or one sees a narrow valley with a row of black tents and groups of horsemen, dotted with black yak and white sheep herds, the whole strangely enlivened by the low barking of dogs and the bleating of yaks and sheep.

/3/ In earlier times Tibetan tribes were scattered far beyond the 177
borders of present-day Tibet toward the west, as far as the provinces of Szechuan and Kansu, probably even throughout Shensi to Honan. Even today there are Tibetan tribes in Szechuan and Kansu, but culturally they have been more strongly influenced by the Chinese, often having also adopted the Chinese language. Here we find all kinds of transitions between nearly pure Tibetans and those that have been almost completely assimilated by the Chinese. In the course 167
of the last 100 years the boundary between the provinces of Szechuan and Kansu on the one hand and Western Tibet, that is to say, the present outlying Chinese provinces of Hsik'ang and Ch'inghai (Kokonor), on the other, has been shifted several times. In Kansu the Chinese government was impelled to do this because of the gradual advance of the Chinese toward the West, and also because of difficult relationships with a third, very restless element of the population of Kansu, the Mohammedans. Although the latter have adopted the Chinese language, dress and customs, they have by no means been assimilated by the Chinese, but are consciously opposed to them. Anthropologically they can be included among the Turkish peoples of Chinese Turkestan (Sinkiang). The Chinese and Mohammedan 311
settlements in Kansu have pushed on as far as the Chinese farmer has found proper conditions - especially on loess soil - for the type of agriculture he has practised since ancient times. In places where the bottom of the valley lends itself to irrigation, the river valleys have become rich oases with luxuriant vegetable and fruit cultures

311 in between the dry, treeless mountains. But the mountainous country, too, can feed the tough and industrious population of Chinese and Mohammedan farmers, provided there are /4/ peaceful political conditions and a settled administration, although naturally these highlands (1500 - 3000 meters) cannot be nearly as densely populated as the lower, warmer loess regions of central and eastern North China.

133 South of the loess country in Kansu the boundary toward Szechuan
177 is formed by a mighty mountain range over 5,000 meters high, a part of the K'un-lun system. From the north, only unimportant branches of Chinese culture have penetrated into these mountains, since here the conditions necessary for Chinese agriculture are lacking. Neither the narrow valleys that have eaten into limestone, primary rock or granite, nor the undulating uplands more than 3,000
[361] meters high are suitable for the Chinese farmer. Sedentary Tibetans or Fantzu (following the Kansu colloquial usage, we shall subsequently refer to the "Tibetans" as "Fantzu") live in the valleys and in the
[241] lower parts of the highland. Even though the summers here are short, crops of Tibetan barley (ch'ing-ku), peas and rape are relatively good. Thus they are able to provide themselves as well as the nomad tribes
231 living still higher up, with the indispensable barley flour. But these Sedentary Fantzu lead a somewhat different life from the Chinese farmer, for besides cultivating their fields, they also raise animals. The yak serves them as mount and beast of burden and gives them milk and butter, which makes them less dependent on crops in bad years, and provides them with an inestimable source of health and energy in this cold mountain climate.

133 You are struck by these conditions if you travel from the provincial
361 capital of Lanchow south through the district of Ho-chou (modern name Lin-hsia) to the famous Labrang monastery which is south of the /5/ loess region in the mountains. You reach the valley of the T'ao-ho from the Huang-ho Valley by traveling through a loess region inhabited mainly by Mohammedans, and through a sparsely settled granite mountain range with a crest not quite 3,000 meters high. South of the T'ao-ho is a deeply furrowed loess landscape that reaches almost 3,000 meters. This is bounded on the other side by the Hsia-ho, and is inhabited by Mohammedans. In the Hsia-ho Valley the percentage of Chinese is again larger, but Mohammedanism has made more and more headway in the course of the last 30 years, partly after very bloody insurrections which were difficult to suppress. This is probably the main reason why the Chinese government has shifted the boundary between Kansu and Ch'inghai farther west.

2: Rock K-5 (1934-) 1947 AF16 Southwest China AF16
Sino-Tibetan Border AE3

CHAPTER IV

WESTERN AND NORTH-WESTERN YUNG-NING

I. AGRICULTURE, ACCESS AND INHABITANTS

Yung-ning 永寧

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The most important part of Yung-ning from an agricultural standpoint, is of course its plain (PLATE 220), which to-day supports 300 families, although 1,000 families could subsist there if rice were cultivated, and all arable land were utilized. Only one half of the plain is now under cultivation, and rice is prohibited from being grown for political reasons. Maize, barley, buckwheat and round peas are the main crops. The plain has a plentiful water supply, as the Hli gyi or K'ai-chi Ho 開基河 [also called Lo-chi Ho 勒汲河 pronounced Le-chi Ho in Yung-ning] winds through it, receiving several affluents in its course over the plain. The latter is at an elevation of 9,500 feet, is perfectly flat, and extends east to the foot of Lion Mountain (Seng-ge ga-mu). In the remote past the Yung-ning plain was undoubtedly a lake, similar to the Lu-ku Lake, which lies 100 feet higher. The plain is surrounded by mountains with many valleys debouching into it; the only outlet is the valley which leads into the Ch'ien-so country in Ssu-ch'uan. The eastern and north-eastern end of the plain is still marshy.

The next place of importance is the long Tsui-yi valley called Wa-erh-lo 挖耳羅 in Chinese, which extends south of Wua-ha Shan, west into the Yangtze. This is a very fertile valley and rice is planted in the middle upper half; the lower part is a dry, arid canyon with steep walls; the head of the valley is wooded.

To the west of Yung-ning is another long valley called Luë-dzu law-k'aw, which also extends into the Yangtze, with another valley joining it called Hĕr-dü, the Har-lĕr-dü of the Na-khi. These valleys unite a short distance before debouching west into the Yangtze, south of San-chiang-k'ou 三江口. The remaining arable land is along the Yangtze, especially at Pu-chio 卜脚 or Law-k'a-khi-llü [also called P'u-dyü]; then along the Zho Chhu on the Hsi-k'ang border in the west of Yung-ning, and at Pa-erh-ch'iao 壩耳橋, south of Yung-ning; and finally the few fields along the shore of the Lu-ku Hu or Yung-ning Lake.

The rest of the country is exceedingly mountainous. The highest peaks are on Wua-ha Shan, which is the northern part of the Yao Shan to the east of Yung-ning. These reach 15,500 feet or more in height.

S ST 131

Access. — The main approaches to Yung-ning from the south are from Yung-pei, north via Lang-ch'ü chou, the present Ning-lang 寧浪; then from Li-chiang via the Yangtze at either T'o-lä-tsu or Chiang-wai 江外, up the Tsui-yi valley opposite Chiang-wai which is the shortest route. The northern route is via Feng-k'o 俸可 or Shang-feng-k'o 上俸可.

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